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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,975	07/02/2001	Teruhisa Kamachi	112857-249	4223

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EXAMINER
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SHARON, AYAL I

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/681,975

Applicant(s)

KAMACHI ET AL.

Examiner

Ayal I Sharon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Introduction***

1. Claims 1-13 of U.S. Application 09/681,975 filed on 07/02/2001 are presented for examination. The application claims priority to Japanese application P2000-199664, filed on 06/30/2000.

### ***Claim Interpretations***

2. Examiner has given applicants' term "benefit information" the broadest reasonable interpretation. Examiner's interpretation corresponds to the limitation in Claim 1, "benefit information showing a benefit of purchasing the virtual commodity." The Merriam-Webster Collegiate Dictionary, ©2001, defines "benefit" as "something that promotes well-being." Therefore, the Examiner finds that the nutritional information on the side of a cereal box, as taught in Fig.11 of the Burke reference, is a form of "benefit information."

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. The prior art used for these rejections is as follows:
5. Burke, R., U.S. Patent 5,848,399. (Henceforth referred to as "**Burke**").
6. The claim rejections are hereby summarized for Applicant's convenience. The detailed rejections follow.
7. **Claims 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Burke.**
8. In regards to Claim 10, Burke teaches the following limitations:
  10. A virtual-space providing method for providing a user terminal connected via a network, with various kinds of services through a three-dimensional virtual space created in the network, said method comprising the steps of:
    - providing a virtual room imitating a real room of a user using the user terminal, on a three-dimensional virtual space so that the virtual room can be browsed using the user terminal connected via the network; and  
(Burke, especially: col.7, lines 18-50 and Fig.3; col.4, line 39 to col.5, line 15)
    - providing a virtual store for selling virtual commodities, which can be placed in said virtual room, on the three-dimensional virtual space; wherein  
(Burke, especially: col.4, line 58 to col.5, line 32)
    - when a virtual commodity is purchased in said virtual store using said user terminal, benefit of purchasing the virtual commodity is given to said user terminal so that the user can enjoy the benefit in a real store.  
(Burke, especially: col.11, lines 64-68)
9. In regards to Claim 11, Burke teaches the following limitations:
  11. A virtual-space providing method according to Claim 10, wherein benefit information corresponding to a benefit of purchasing said virtual commodity is written on a removable storage medium provided in said user terminal; and when said storage medium is brought to the real store, a benefit is given according to the benefit information written on said storage medium.  
(Burke, especially: col.11, lines 64-68; and Fig.1, Item 68; and col.6, lines 50-60)
10. In regards to Claim 12, Burke teaches the following limitations:
  12. A virtual-space providing method according to Claim 10, wherein, when intention to purchase a real commodity corresponding to a virtual commodity, which has been purchased using said user terminal and has been placed in the virtual room, is presented, connection with on-line shopping on the network selling real commodities is established.

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(Burke, especially: col.11, lines 64-68)

11. In regards to Claim 13, Burke teaches the following limitations:

13. A virtual-space providing method according to Claim 10, wherein, when a commodity is purchased in the real store, a virtual commodity imitating the purchased commodity, is placed in the virtual room.

(Burke, especially: col.11, lines 64-68; and Fig.1, Item 68; and col.6, lines 50-60)

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The prior art used for these rejections is as follows:

14. Burke, R., U.S. Patent 5,848,399. (Henceforth referred to as "**Burke**").

15. Burke, R., U.S. Patent 6,604,681. (Henceforth referred to as "**Burke\_2**").

16. Mass, Y. et al. "VRCommerce – Electronic Commerce in Virtual Reality". Proc. of the 1<sup>st</sup> ACM Conf. on Electronic Commerce. Nov. 1999. pp.103-109. (Henceforth referred to as "**Mass**").

17. The Virtual Reality Modeling Language (VRML) Version 1.0 Specification. Nov.9, 1995. (Henceforth referred to as "**VRML**").

18. The claim rejections are hereby summarized for Applicant's convenience. The detailed rejections follow.

**19. Claims 1 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke in view of Mass.**

20. In regards to Claim 1, Burke teaches the following limitations:

1. A virtual-space providing apparatus which is connected to a user terminal via a network, and which provides said user terminal with various kinds of services through a three-dimensional virtual space created in the network, said virtual-space providing apparatus comprising:

virtual store providing means for providing a virtual store on the user terminal connected via the network, said virtual store selling virtual commodities imitating real commodities, on the three-dimensional virtual space; and  
(Burke, especially: col.4, line 58 to col.5, line 32)

benefit-information transmitting means, wherein, when the user purchases a virtual commodity in the virtual store provided by said virtual store providing means using said user terminal, benefit information showing a benefit of purchasing the virtual commodity is transmitted to said user terminal.

(Burke, especially: col.9, line 65 to col.10, line 40. and Figs.10-11. Examiner interprets the nutritional information shown in Fig.11 as corresponding to "benefit information")

Burke teaches that "... when a consumer has indicated an intention to buy a product ... The product is then moved into the shopping cart 214 as shown in Fig.12 (step 167)" (See Burke: col.9, line 65 to col.10, line 18).

However, while Burke teaches a "shopping cart" within a "virtual store", Burke does not expressly teach the use of a separate "virtual room" separate from the "virtual store", following limitation:

virtual room providing means for providing a virtual room imitating a real room of a user using said user terminal, which can be browsed using the user terminal connected via the network, on the three-dimensional virtual space;

Mass, on the other hand, teaches the use of a "Virtual Reality Hallway" (see p.106) whose functions include:

- a. "The VRH is a virtual device to connect among two or more virtual spaces, in a continuous way."

- b. "To allow continuous navigation from one virtual space to the other, while loading the spaces and the elements in them only as needed."
- c. "To allow smooth transitions between the floor plans of the virtual spaces, hiding possible conflicts between their 3D representations."
- d. "To allow multiple virtual spaces to connect the same door, in a way that a user coming in from one virtual space would not be aware of the other virtual spaces connected to the door ..."

Implicit in this teaching is that it was common practice to use multiple two or more virtual spaces that were unconnected, and to transition between these virtual spaces in an "unsmooth" manner.

Examiner finds that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Burke with those of Mass, because doing so would enable "...connecting among two or more virtual spaces, in a continuous way" (see Mass, p.106).

21. In regards to Claim 5, Burke teaches the following limitations:

5. A virtual-space providing apparatus according to Claim 1, wherein, when an intention to purchase a real commodity corresponding to the virtual commodity purchased by using said user terminal and placed in the virtual room is presented by using said user terminal, said virtual store providing means establishes connection with an on-line shopping device on the network selling real commodities.  
(See Burke: col.9, line 65 to col.10, line 18).

22. In regards to Claim 6,

6. A virtual-space providing system, which is connected via a network to a user terminal used by a user, a real-store terminal installed in a store in a real space, and a virtual-space providing apparatus providing said user terminal with various kinds of services through a three-dimensional virtual space, wherein said virtual-space providing apparatus comprises:

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virtual room providing means for providing a virtual room imitating a real room of the user using the user terminal, which can be browsed using the user terminal connected via the network, on the three-dimensional virtual space;

virtual store providing means for providing the user terminal connected via the network with a virtual store selling virtual commodities imitating real commodities, on the three-dimensional virtual space; and

benefit-information transmitting means for transmitting benefit information to the user terminal so that in the real space the user can get a benefit from purchasing a virtual commodity, when the virtual commodity is purchased in the virtual store provided by said virtual store providing means; and

said user terminal comprises:  
a removable storage medium; and  
writing means for writing the benefit information transmitted from said benefit-information transmitting means, on said storage medium.

Claim 6 is rejected based on the same reasoning as claim 1. Claim 6 is a system claim that recites the equivalent limitations as are recited in method claim 1, and taught throughout Burke and Mass.

23. In regards to Claim 7, Burke teaches the following limitations:

7. A virtual-space providing system according to Claim 6, wherein said real-store terminal comprises reading means for reading the benefit information written on the storage medium, wherein said real-store terminal provides the user terminal with the benefit according to the benefit information read by the reading means.  
(Burke, especially: col.9, line 65 to col.10, line 40. and Figs.10-11. Examiner interprets the nutritional information shown in Fig.11 as corresponding to "benefit information" and the database items 50 and 61 in Fig.1)

**24. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke in view of Mass and further in view of VRML.**

25. In regards to Claim 2, Burke does not teach the following limitations:

2. A virtual-space providing apparatus according to Claim 1, wherein, when a virtual commodity is purchased in the virtual store using said user terminal, said virtual store providing means places the virtual commodity in the virtual room.

The VRML reference, on the other hand, teaches a language standard for reading and writing 3D objects in files that are called "scene graphs" (see pp.2-



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3). Inherent to VRML is the ability to copy and paste one 3D object from one file into another file.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the invention taught in Burke by using the VRML standard taught in the VRML reference, because the VRML language was designed to "... become the standard language for interactive simulation within the World Wide Web." (see VRML, pp.2, "Introduction").

26. In regards to Claim 8,

8. A virtual-space providing system according to Claim 6, wherein, when a virtual commodity is purchased in the virtual store by using the user terminal, said virtual store providing means places the virtual commodity in the virtual room.

Claim 8 is rejected based on the same reasoning as claim 2. Claim 8 is a system claim that recites the equivalent limitations as are recited in method claim 2, and taught throughout Burke and VRML.

**27. Claims 3-4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke in view of Mass and further in view of Burke\_2.**

28. In regards to Claim 3, Burke does not expressly teach the following limitations:

3. A virtual-space providing apparatus according to Claim 1, wherein, when a commodity is purchased in the real store, said virtual store providing means places a virtual commodity imitating the real commodity in the virtual room.

Burke\_2, on the other hand, expressly teaches these limitations. (See Burke\_2: col.2, line 59 –col.3, line 53 and Fig.3 -"touch screen kiosks"; col.4, line 10 – col.5, line 27 and Figs.5-6 – "self-checkout system" and "self-scanning system").

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Burke\_2 teaches that "If the consumer is interested in purchasing an item, the button labeled 'Add to shopping basket' can be touched." (See Burke\_2: col.3, lines 28-37). Examiner interprets that this "shopping basket" corresponds to the "shopping cart" taught in Burke.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention taught in Burke with those in Burke\_2, because Burke\_2 teaches the use of the "shopping basket" concept for both 3D virtual shopping systems (See col.2, lines 10-57) and for real shopping systems.

29. In regards to Claim 4, Burke teaches the following limitations:

4. A virtual-space providing apparatus according to Claim 2 or 3, wherein said virtual store providing means comprises an accumulating means for accumulating virtual commodities as three-dimensional image data.  
(Burke, especially: col.4, lines 33-36; and col.10, lines 10-15)

30. In regards to Claim 9,

9. A virtual-space providing system according to Claim 6, wherein said real-store terminal comprises commodity information transmitting means for transmitting at least commodity information showing the purchased commodity, when a real commodity is purchased, to said virtual store providing means; and said virtual store providing means places a virtual commodity imitating the purchased commodity, in the virtual room according to the commodity information transmitted from said commodity information transmitting means.

Claim 9 is rejected based on the same reasoning as claim 3. Claim 9 is a system claim that recites the equivalent limitations as are recited in apparatus claim 3, and taught throughout Burke and VRML.

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***Correspondence Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ayal I. Sharon whose telephone number is (571) 272-3714. The examiner can normally be reached on Monday through Thursday, and the first Friday of a biweek, 8:30 am – 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached at (571) 272-3716.

Any response to this office action should be faxed to (703) 872-9306 or mailed to:

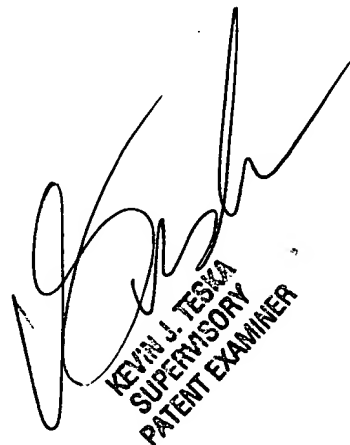
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Washington, DC 20231

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center 2100 Receptionist, whose telephone number is (571) 272-2100.

Ayal I. Sharon

Art Unit 2123

November 29, 2004



KEVIN J. TESKA  
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